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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,364	08/27/2001	Barry L. Karger	NU-467AX	3984
207	7590	08/24/2004	EXAMINER	
WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP			CHOI, LING SIU	
TEN POST OFFICE SQUARE				
BOSTON, MA 02109			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/869,364

Applicant(s)

KARGER ET AL.

Examiner

Ling-Siu Choi

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ed

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 08/02/04, 07/19/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. This Application is a 371 of PCT/US00/00470 filed January 7, 2000. Claims 1-6 are now pending, wherein claim 1 is drawn to an electron-pneumatic distributor; claim 2 is drawn to a microfabricated  $\mu$ -TAS system; claims 3-6 are drawn to a electrospray system for a mass spectrometer. After further consideration, the Restriction is moved.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

**A person shall be entitled to a patent unless --**

**(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.**

**(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.**

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Xue et al. [Anal. Chem., **69**, 426-430 (1997)].

The present invention relates to an electro-pneumatic distributor comprising

a microfabricated structure	an integrated array of <b>channels for gas transport</b>
	electrodes
wherein the channels and electrodes are oriented to permit simultaneous or sequential application of pressure and electric current to selected entrance ports of a device external to the structure	

(summary of claim 1)

Xue et al. disclose a microfabricated multiple-channel glass chips, wherein the chip has nine parallel channels, each channel being connected to wells to allow fluid filling and sample injection into the channel and a high voltage is applied individually from each buffer reservoir for spraying sample sequentially from each channel (abstract; page 427). It is noted that 0.1% HAc aqueous solution at a rate of 100-200 nL/min is through the channel (page 427, second column), which implies that the channel is for the liquid fluid transport. However, the recitation "channels for gas transport" is not a positive limitation but only requires the ability to so perform. It has been held that "a recitation directed to the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art if the prior art has the capability to so perform." *Ex parte Masham*, 2 USPQ2d 1647 (Bd.Pat.App.&Inter. 1987) and MPEP 2114. Thus, the present claim is anticipated by the disclosure of Xue et al..

4. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Karger

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et al. (US 5,872,010).

Karger et al. disclose a liquid handling system comprising a microscale liquid handling substrate having one or more channels integrally formed therein, each channel terminating in one exit port in an outler surface of the substrate for transfer of a microscale quantity of a liquid sample off the substrate (claim 1). It is noted that the recitation "channels for gas transport" is not a positive limitation but only requires the ability to so perform. It has been held that "a recitation directed to the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art if the prior art has the capability to so perform." *Ex parte Masham*, 2 USPQ2d 1647 (Bd.Pat.App.&Inter. 1987) and MPEP 2114. Thus, the present claim is anticipated by the disclosure of Karger et al..

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Lewis et al. (EP 1 382 382 A1).

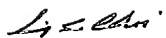
Lewis et al. disclose a gas distributor comprising a plurality of microchannel on the plate (abstract). The publication date is January 21, 2004 and is later than the priority date of the present invention.

6. The drawings are missing from the application.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 371-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 371-272-1114.



Ling -Siu Choi, Ph.D.

August 20, 2004